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| 10/707,820      | 01/14/2004  | Patrick Joseph Sweeney |                     | 1819             |

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COOLEY GODWARD KRONISH LLP  
ATTN: PATENT GROUP  
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WASHINGTON, DC 20005-2221

EXAMINER

OSBORNE, LUKE R

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2123

|           |               |
|-----------|---------------|
| MAIL DATE | DELIVERY MODE |
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05/15/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                               |   |  |
|------------------------------|-------------------------------|---|--|
| <b>Office Action Summary</b> | Application No.<br>10/707,820 | Applicant(s)<br>SWEENEY, PATRICK JOSEPH |  |
|                              | Examiner<br>Luke Osborne      | Art Unit<br>2123                        |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2007.
- 2a) ☒ This action is FINAL.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 8-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 8-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Examination***

1. The Examiner of record has changed from Mary Jacob to Luke Osborne.

### ***Drawings***

2. Examiner acknowledges the amendment to the specification regarding reference numeral 202. Consequently the objection is withdrawn.

### ***Specification***

3. Examiner acknowledges the amendments / arguments regarding the minor informalities. Consequently the objections are withdrawn.

### ***Claim Objections***

4. Examiner acknowledges the cancellation of claims 4-7. Consequently the objection is withdrawn.

### ***Claim Rejections - 35 USC § 112***

5. Examiner acknowledges the amendments to claims 1-3, and the cancellation of claims 4-7. Consequently the rejections are withdrawn.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

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art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 8, 13, 14, and 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 8 as exemplary of claims 8 and 14 where the logical system simulator defines a configuration for the RFID system components based on the simulation. The Examiner has not found support for this limitation in the disclosure as filled.

Regarding claim 13 as exemplary of claims 13 and 22 support for the limitations of sending the specification to another simulator and validating that specification have not been found in the disclosure as filled.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 12-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 12-24 are non-statutory for being an

abstract idea, this abstract idea merely manipulating data. The data manipulations lack a practical application and a useful, concrete, and tangible result.

To be statutory, a claimed computer-related process must either:

(A) result in a physical transformation outside the computer for which a practical application is either disclosed in the specification or would have been known to a skilled artisan, or

(B) be limited to a practical application, by having a useful, concrete, and tangible result.

The term "practical application" means to manufacture in the case of a composition or product, to practice in the case of a process or method, or to operate in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are to the extent permitted by law or Government regulations available to the public on reasonable terms [35 USC 201 (f)].

Claim 12 as exemplary of claims 12 and 20 do not recite a physical transformation outside of a computer. There is always some form of physical transformation within a computer because a computer acts on signals and transforms them during its operation and changes the state of its components during the execution of a process. Even though such a physical transformation occurs within a computer, such activity is not determinative of whether the process is statutory because such transformation alone does not distinguish a statutory computer process from a

nonstatutory computer process. What is determinative is not how the computer performs the process, but what the computer does to achieve a practical application.

A claim is limited to a practical application when the method, as claimed, produces a concrete, tangible and useful result; i.e., the method recites a step or act of producing something that is concrete, tangible and useful.

The limitations of claim 12 of selecting part to be simulated, and then changing the part to be simulated based on a signal do not produce a useful, concrete, and tangible result.

The limitations of claim 20 of sending a part, and the user modifying the part do not produce a useful, concrete, and tangible result.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-3, and 8-24 rejected under 35 U.S.C. 103(a) as being unpatentable over "A framework of Virtual Design for Product Customization", by Tseng et al., hereinafter Tseng in view of Beroulle of record.

Regarding claim 1 Tseng teaches an apparatus, comprising:

a database configured to store a plurality of system component specifications [Tseng: Page 11, Fig. 3 Engineering Database]; and

a logical system simulator coupled to the database [Tseng: Page 11, Fig. 3 Simulation System], the logical system simulator configured to simulate an electronic representation of an system based on the plurality of system component specifications to select at least two system components [Tseng: Page 11, Thus, results from a simulation are fed directly into a product design decision].

Tseng does not expressly teach that the virtual design for product customization is used for RFID technology. However, Tseng specifies that this framework would benefit any sector where consumers demand high-quality, low priced and customized products [Tseng: Page 7, Section 1, Introduction].

Beroulle teaches the design and simulation of RFID systems [Beroulle: Page 102, Abstract]. Beroulle also teaches that RFID design and simulation and the ultimate production of such devices is a field in which designers must reduce their time-to-market [Beroulle: Page 102 Introduction].

It would have been obvious to a person of ordinary skill in the art in RFID system design at the time Applicant's invention was made to combine the Virtual design system of Tseng with the RFID design system of Beroulle.

The motivation for doing so would have been the advantage of reducing time to market while still keeping product customization as noted above.

Regarding claim 2 Tseng in view of Beroulle teaches the apparatus of claim 1, wherein the database is configured to update an RFID system component specification from the plurality of RFID system component specifications in the database based on information received from a peer system via an external data network access means [Tseng: Figure 3, the engineering database is connected to the Simulation System, Virtual Design System and the Visualization system, all of which can update the component specifications in the database].

Regarding claim 3 Tseng in view of Beroulle teaches the apparatus of claim 1, wherein the database is configured to update an RFID system component specification from the plurality of RFID system component specification in the database based on information received from a deployed radio frequency interrogator, the deployed radio frequency interrogator corresponding with the RFID interrogator [Tseng: Figure 1, Hardware (physical) prototype, this prototype as shown is used to update the design and the component specifications].

Regarding claim 8, Tseng in view of Beroulle teaches the apparatus of claim 1, wherein the logical system simulator is configured to define a configuration for the at least two RFID system components based on the simulation [Tseng: Figure 2. Simulations are fed back into the Conceptual design, embodiment design, and the detail design].



Regarding claim 9, Tseng in view of Beroulle teaches the apparatus of claim 1, further comprising a radio wave propagation simulator couples to the logical system simulator, the logical system simulation configured to simulate the electronic representation based on a signal strength at a location within an architectural environment associated with the electronic representation of the RFID system, the radio wave propagation simulator configured to simulate the signal strength [Beroulle: Page 103, RFID system modeling].

Regarding claim 10, Tseng in view of Beroulle teaches the apparatus of claim 1, the apparatus of claim 1, wherein the logical system simulation configured to simulate the electronic representation is based on a minimum read rate of an interrogator simulated as part of the electronic representation of the RFID system [Beroulle: Page 103, Section RFID system modeling, Section A].

Regarding claim 11, Tseng in view of Beroulle teaches the apparatus of claim 1, wherein the logical system simulation configured to simulate the electronic representation is based on at least one of a cost of a component within the electronic representation of the RFID systems or a definition of an obstacle within the electronic representation of the RFID system [Tseng: Ultimately, through virtual design, customers can directly interact with the CAD systems to make trade-offs among factors that are important to them. These factors can be performance, aesthetics, value, cost, urgency, and others (Abstract)].

Claim 12 contains similar limitations as claim 3, thus is rejected for the same reasons.

Regarding claim 13, Tseng in view of Beroulle teaches the method of claim 12, wherein the RFID simulator is a first RFID simulator, the method further comprising:

    sending the modified specification from the first RFID simulator to a second RFID simulator; and validating the modified specification associated with the simulated RFID tag at the second RFID simulator [Beroulle: In the following part, a behavioral antenna model is described. Then, in the third part, to validate this model and to demonstrate its interest, we propose a complete behavioral model of a Radio-Frequency Identification (RFID) system (Page 102, Introduction, right column, second full paragraph)].

Regarding claim 14, Tseng in view of Beroulle teaches the method of claim 12, further comprising

    defining an RFID tag configuration for the physical RFID tag based on the simulation of the electronic representation of the RFID system [Tseng: Page 11, Thus, results from a simulation are fed directly into a product design decision] .

Regarding claim 15, Tseng in view of Beroulle teaches the method of claim 12, wherein the electronic representation of the RFID system is defined based on a user-defined constraint that includes at least one of a width of an interrogation field

associated with a component of the electronic representation of the RFID system or a height of the interrogation field associated with the component of the electronic representation of the RFID system [Berouille: BS electromagnetic zone of influence (Page 104, left column)].

Claims 16, 17 contain similar limitations as claim 11, thus is rejected for the same reasons.

Claim 18, contains similar limitations as claim 1, thus is rejected for the same reasons.

Claim 19 contains similar limitations as claim 10, thus is rejected for the same reasons.

Claims 20-24 contain similar limitations as claims 2, 3, and 11, thus are rejected for the same reasons

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

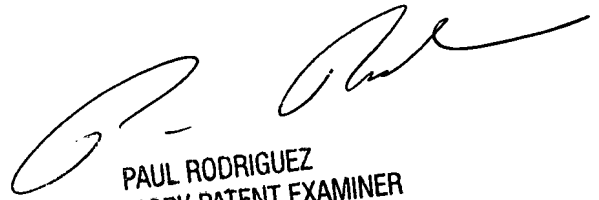
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luke Osborne whose telephone number is (571) 272-4027. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul L. Rodriguez can be reached on (571) 272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LRO



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